

Level 2 Status

Science Team Meeting
October 2003
Greenbelt, Maryland

Sung-Yung Lee (Sung-Yung.Lee@jpl.nasa.gov)

Thomas Hearty

Evan Manning

Edward Olsen

October 21, 2003



October, 2003
syl

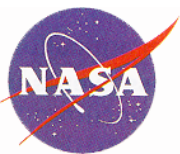
Level 2 Status



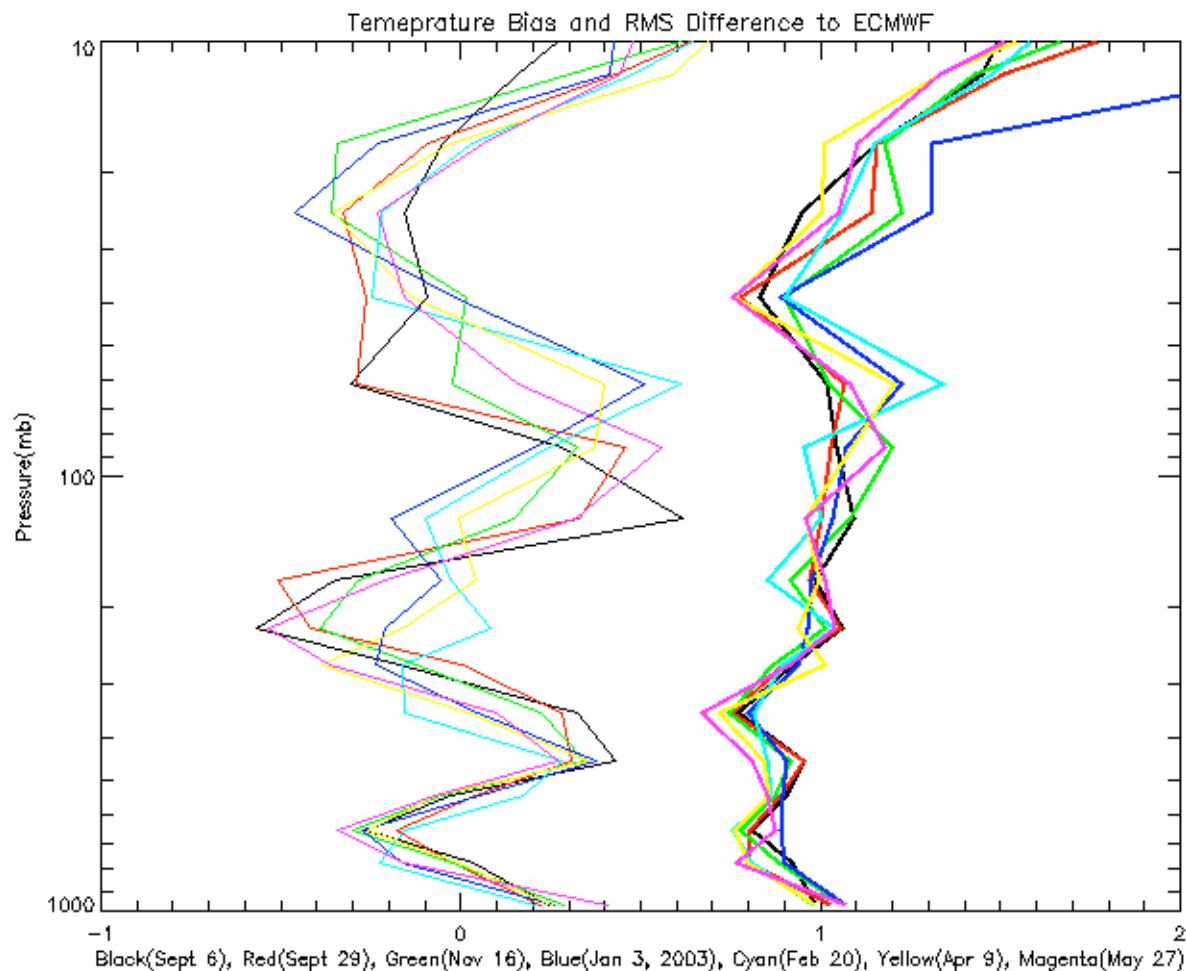
Summary



- V3.0.8 went operational at Goddard DAAC
 - Provisional validated over ocean surface between 40N and 40S
 - Beta validation else where
 - Started public release in August 2003
 - Will process all data since Sept 2002
- V3.1.9 was used to process level 2 data for Jan 2003 for R. Atlas of GSFC
 - Better rejection criteria
 - No tuning of water vapor channels
 - Error terms updated
- There were three more builds at JPL with minor updates
 - V3.2.1 (Masuda wind update, CH4/CO retrieval, Update QA on input radiance)
 - V3.2.2 (AMSU level 1b update to implement sidelobe correction)
 - V3.2.3 (Miscel. error handling, MW surface improvement, Common error term between MW only and final algorithms)
- Sidelobe correction for AMSU channels were implemented and being analyzed
 - Smaller standard deviation of obs - calc
 - But negative impact on retrieval
 - Needs further analysis

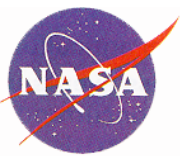


Temperature Statistics vs ECMWF v3.1.9 for Nine Focus Days

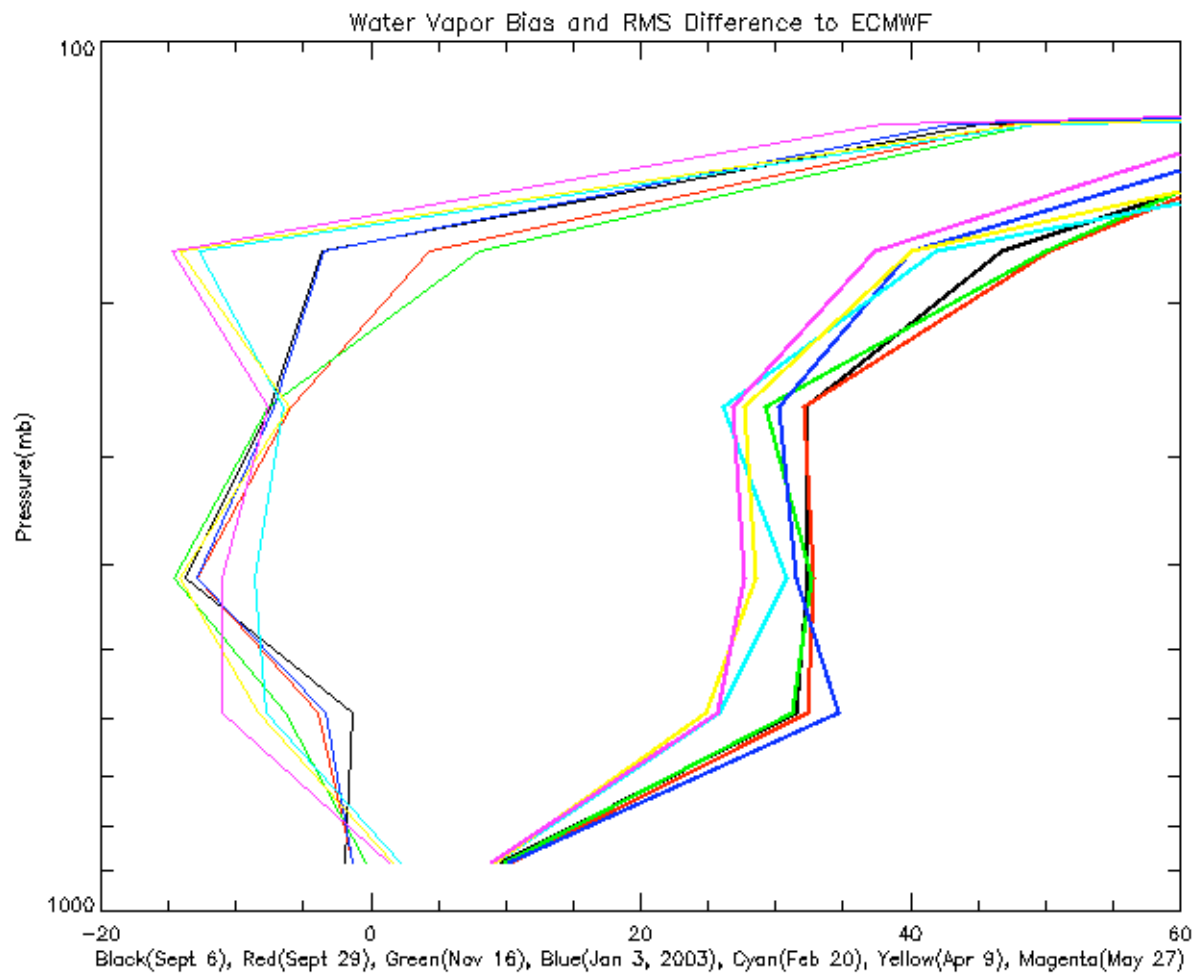


October, 2003
syl

Level 2 Status

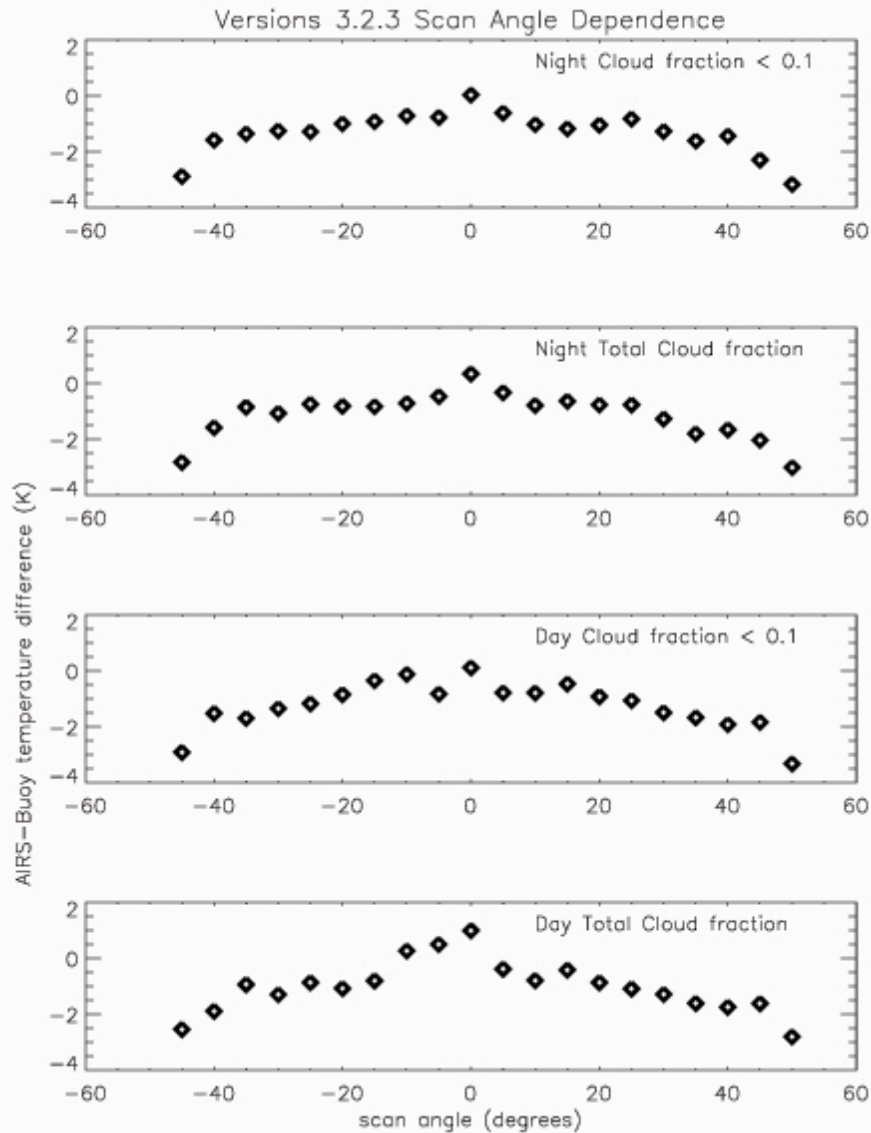


Water Vapor Statistics vs ECMWF v3.1.9 for Nine Focus Days



October, 2003
syl

Level 2 Status



Angle Dependency of Surface Skin Temperature Anomaly

D. Hagan



Public Release of AIRS Level 2 Data

- Version v3.0.8
- Started in August 2003
 - Old data since September 2002 will be processed
- Level 2 Standard files
- Level 2 Support files
- Level 2 Cloud Cleared Radiance files
- Daily Browse products
 - Ascending/Descending maps at one degree by one degree resolution
 - Cloud Fraction, Surface Skin temperature, Total Precipitable Water Vapor, Total Ozone Burden, Total Cloud Liquid Water, Rain Rate, Emissivities at 800, 1000, 1200, and 2500 cm^{-1}
- Documentation
 - http://daac.gsfc.nasa.gov/atmodyn/airs/airs_documentation.html
- Points of Contact
 - Atmospheric Dynamics Data Support Team at atmdyn-dst@daac.gsfc.nasa.gov
 - Dr. Edward Olsen at Edward.T.Olsen@jpl.nasa.gov



October, 2003
syl

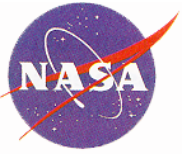
Level 2 Status



Ordering/Downloading AIRS Data

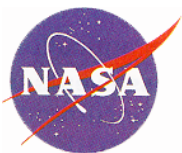


SYSTEM	DESCRIPTION from AIRS Data Support	URL
DATA POOL	A quick search for data products most frequently requested. User can access anonymous ftp area for retrieval of selected AIRS Level1B and Level2 products. Data retrieved in this manner can not be added to the shopping cart of the search and order function.	http://daac.gsfc.nasa.gov/data/datapool/AIRS_DP/
WHOM	WHOM (Web Hierarchical Ordering Mechanism) is the Goddard DAAC Search and Order system which is a simple point-and-click web interface used to search for and order nearline data products archived locally. Data is displayed in tables based on a hierarchical organization. Descriptive information of each data product is provided.	http://daac.gsfc.nasa.gov/data/dataset/AIRS/
EDG	A WWW interface to access all data available in NASA's Earth Observation System Data Information System and related data centers. With EDG, a user can search for and acquire a large variety of earth, ocean, and atmospheric science data obtained from EOS instruments.	http://eos.nasa.gov/imswelcome/



Development Schedule

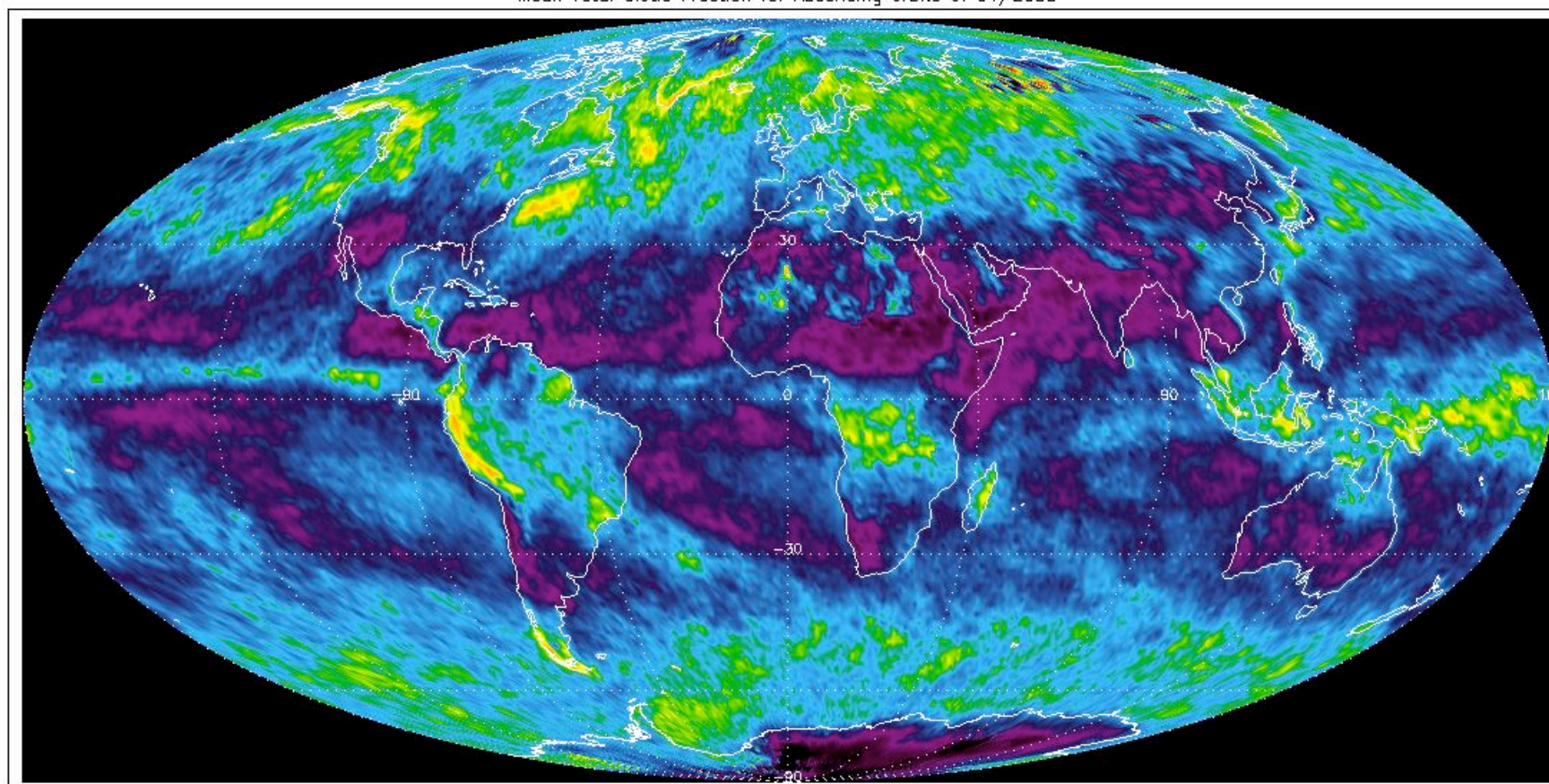
- V3.5 delivery to NESDIS/NRT
 - February 2004 with software freeze at the end of January 2004
 - Retrieval Quality Control update
 - Other Items in Wishlist
 - Sidelobe correction
 - Emissivity update
- V4.0 delivery to DAAC
 - September 2004 with June 2004 software freeze
 - Details to be worked out



Monthly Mean Cloud Fraction Ascending Orbits - January 2003



Mean Total Cloud Fraction for Ascending orbits of 01/2003



JPL

October, 2003
syl

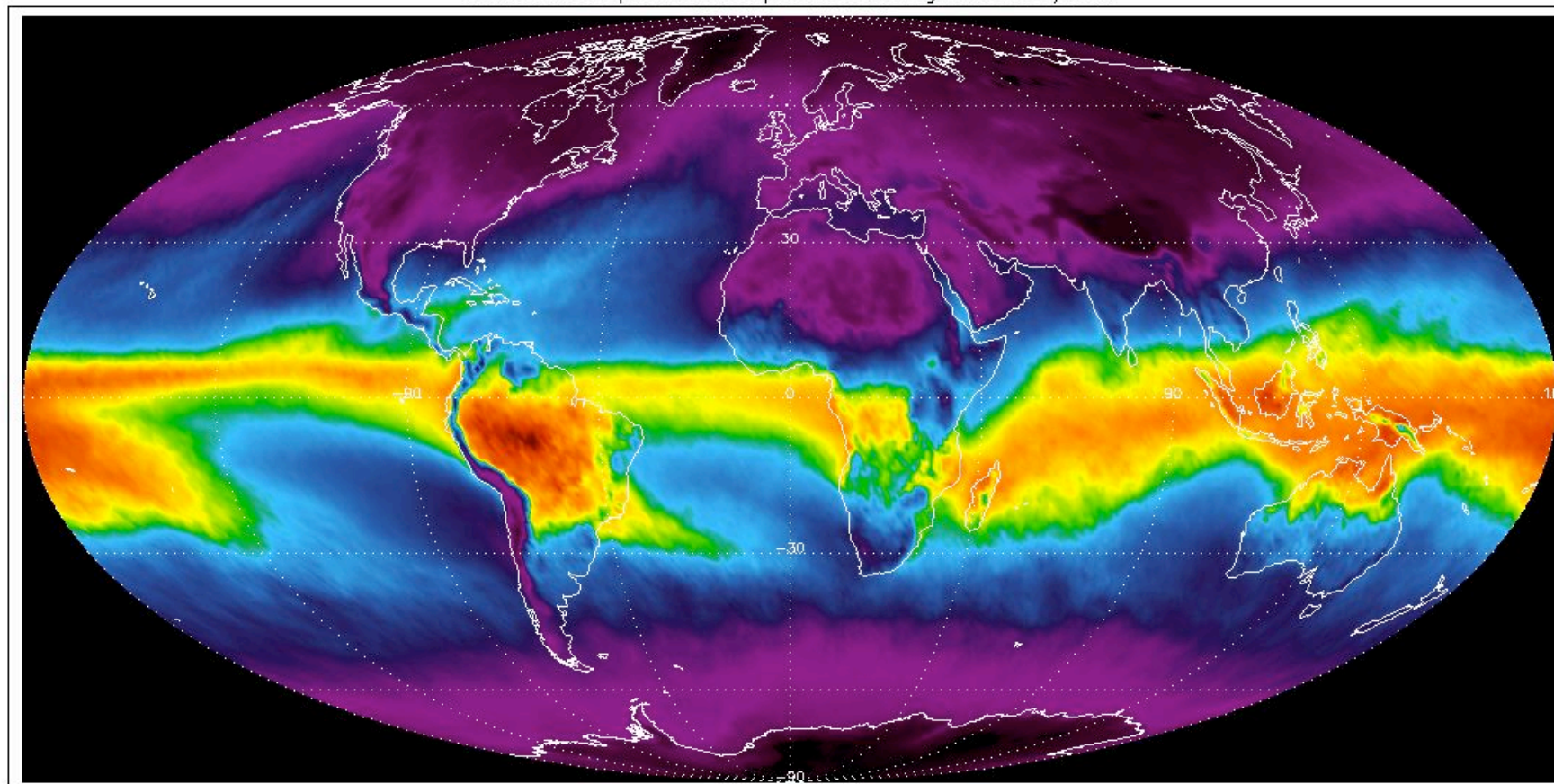
Level 2 Status



Monthly Mean Total Precipitable Water Vapor Descending Orbits - January 2003

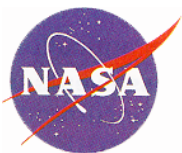


Mean Total Precipitable Water Vapor for Descending orbits of 01/2003



October, 2003
syl

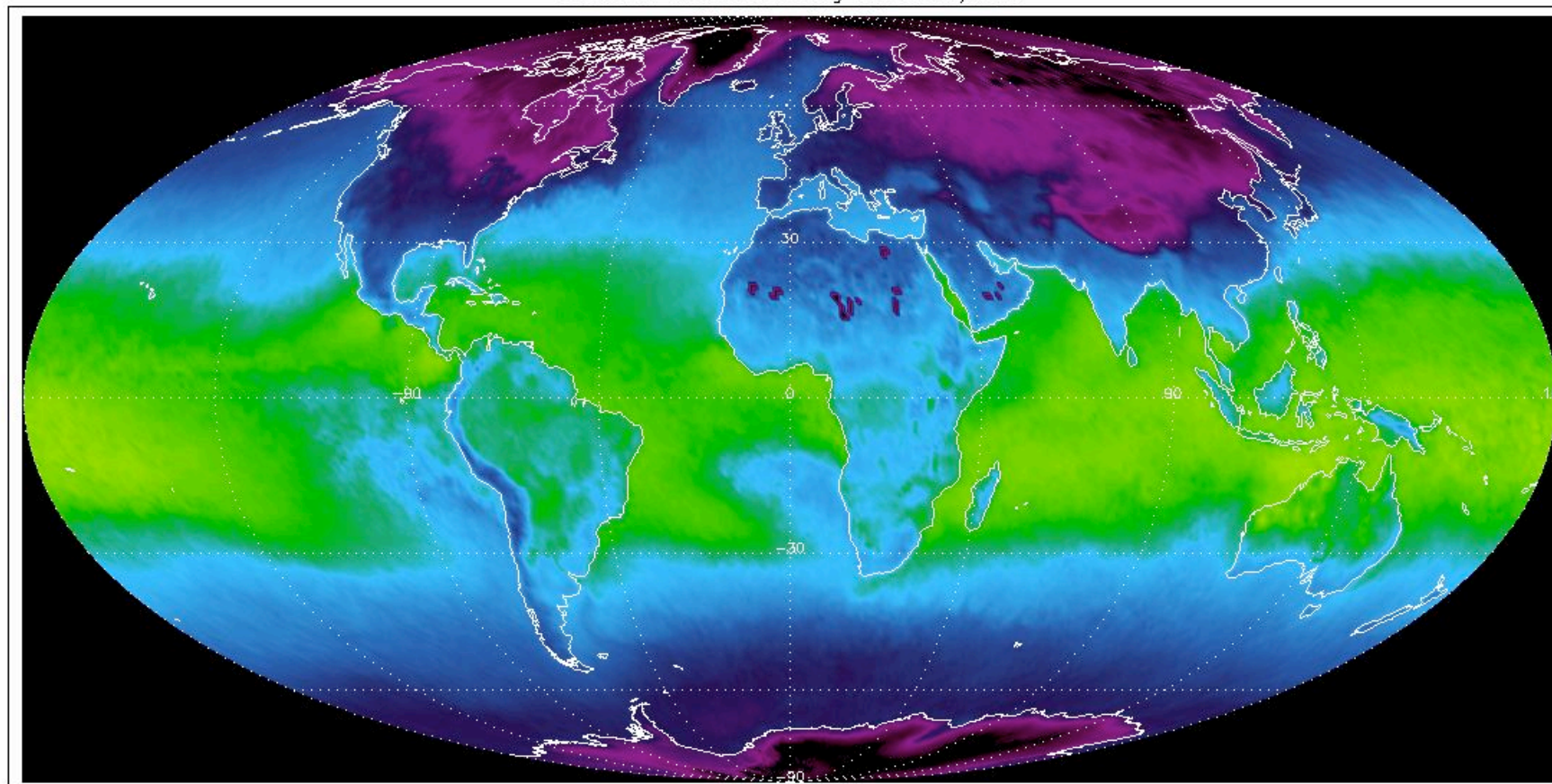
Level 2 Status



Monthly Mean Surface Skin Temperature Descending Orbits - January 2003



Mean Total SST for Descending orbits of Q1/2003



October, 2003
syl

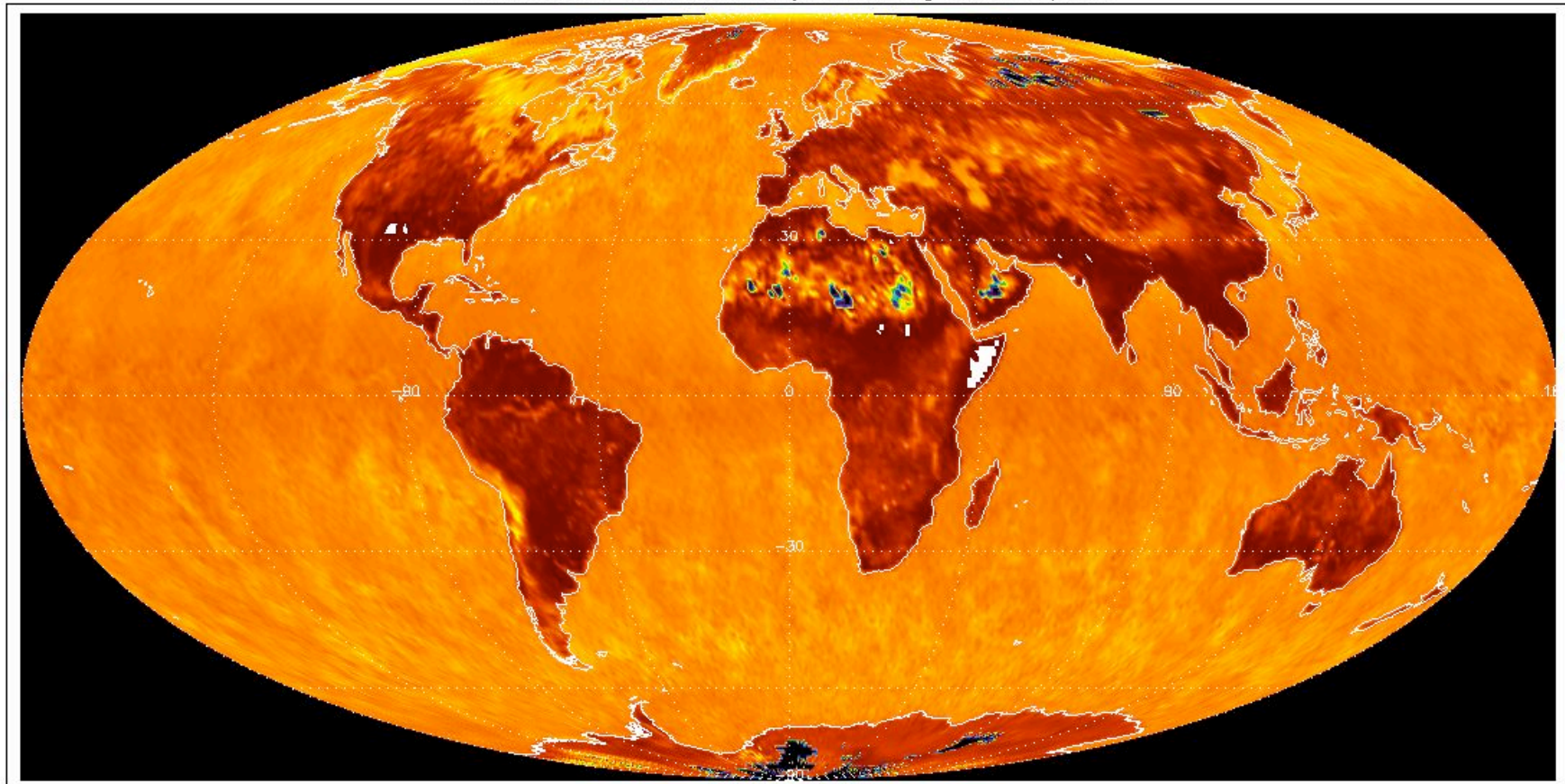
Level 2 Status



Monthly Mean 2500 cm⁻¹ Emissivity Ascending Orbits - January 2003



Mean 2500 cm⁻¹ Surface Emissivity for Ascending orbits of 01/2003



October, 2003
syl

Level 2 Status